## **APPENDIX E.**

Overlay Maps of Species and/or Critical Habitat Occurrence with Cultivated and Orchard/vineyard Crop Use.

## **Data sources and limitations**

The geographic data sets used in this analysis are limited with respect to their accuracy and timeliness. The National Land Cover Data Set (NLCD 2001) represents the most current and comprehensive collection of national land use and land cover information for the United States and represents land cover data obtained between 1994-1998. Two additional data sets were included to account for uses not clearly defined by the NLCD. These supplemental data include orchard and vineyard land cover data from the California Gap Analysis Project data (CaGAP 1998). The relatively coarse spatial scale and general classification categories of these data sets preclude use of the data for highly localized study. As new updates to existing data occur, these will also be evaluated and incorporated as appropriate.

- ESRI. 2002. Detailed Counties, ESRI data and maps. (1:24,000) www.esri.com
- GAP. 1998. Gap Analysis. Orchard/vineyard land cover data. National Biological Information Infrastructure. <a href="https://www.nbii.gov">www.nbii.gov</a>
- NLCD. 2001. Multiresolution Land Characteristics (MRLC) <u>www.mrlc.gov</u>

There are many types of habitat depicted in the maps that follow: critical habitat, core areas, distribution points, and occurrence sections. Critical habitat spatial data for the BCB, CRLF, CTS, and VELB were obtained from USFWS critical habitat portal (<a href="http://crithab.fws.gov/">http://crithab.fws.gov/</a>). Occurrence sections for the BCB, CTS, SFGS, SJKF, SMHM, and VELB were obtained from complaint *Center for Biological Diversity (CBD) vs. EPA et al.* (Case No. 07-2794-JCS). Because these sections represent a one-mile square area that contains the occurrence point, the sections were not included in the overlap analysis that is shown in some maps. Distribution points the BCB, CTS, SFGS, SJKF, SMHM, and VELB were obtained from USFWS documents (references follow). Points were digitized from paper maps, and as such are limited in their utility for overlap analysis, and were not included. Sources for spatial data and information are presented, below.

- CRLF CNDDB Occurrence Sections California Natural Diversity Database http://www.dfg.ca.gov/bdb/html/cnddb.html
- USFWS. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). Region 1, USFWS, Portland, Oregon
- USFWS. 2002. California Red-legged frog Core Areas
- USFWS. 2006. Endangered and threatened wildlife and plants: determination of critical habitat for the California red-legged frog. 71 FR 19244-19346
- USFWS. 1985. Recovery Plan for the San Francisco Garter Snake (Thamnophis sirtalis
- tetrataenia). Portland, Oregon
- USFWS. 1984. Salt Marsh Harvest Mouse and California Clapper Rail Recovery Plan. Portland, Oregon
- USFWS. 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. Portland, Oregon
- USFWS.1998. Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area. Portland Oregon
- USFWS. 2001. Endangered and threatened wildlife and plants: determination of critical habitat for the Bay Checkerspot Butterfly. 66 Federal Register 21449-21489
- USFWS. 1980. Listing the Valley Elderberry Longhorn Beetle as a Threatened Species with Critical Habitat. 45 Federal Register: 52803-52807
- USFWS. 2005. Endangered and threatened wildlife and plants: determination of critical habitat for the California tiger salamander, central population. 70 Federal Register 49379-49458

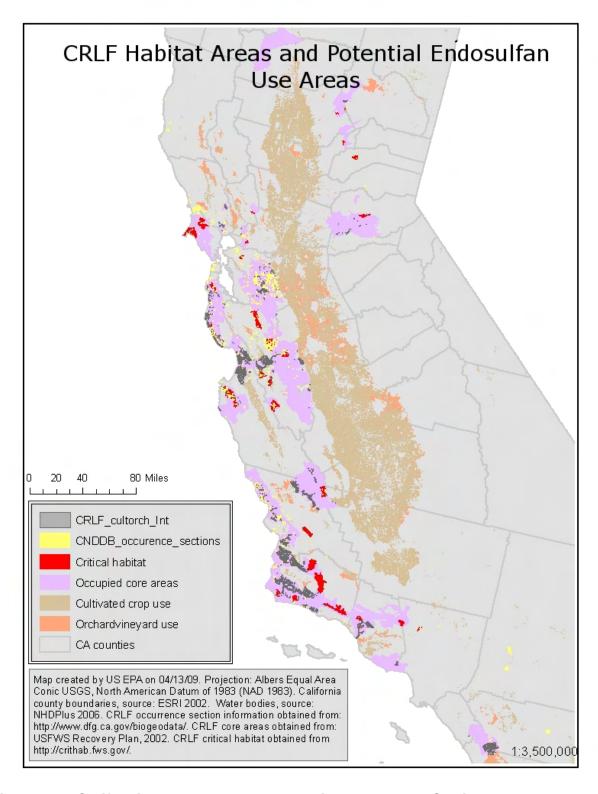


Figure E.1. California Red Legged Frog Habitat Areas and Cultivated Crop/Orchard Use

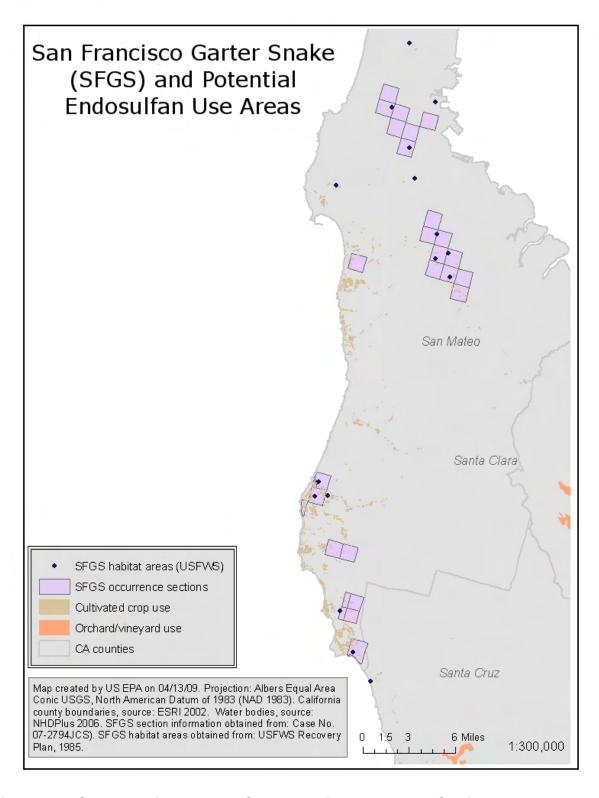


Figure E.2. San Francisco Garter Snake Habitat Areas and Cultivated Crop/Orchard Use

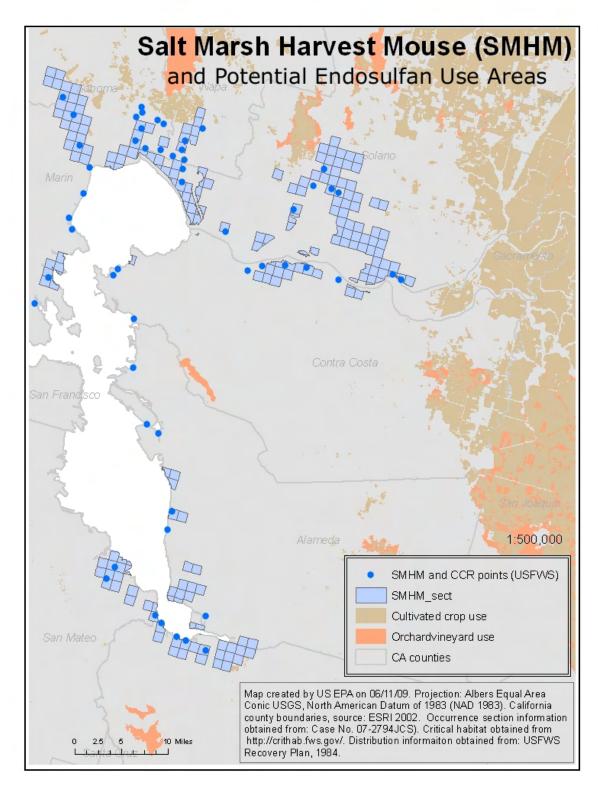


Figure E.3. Salt Marsh Harvest Mouse Habitat Areas and Cultivated Crop/Orchard Use

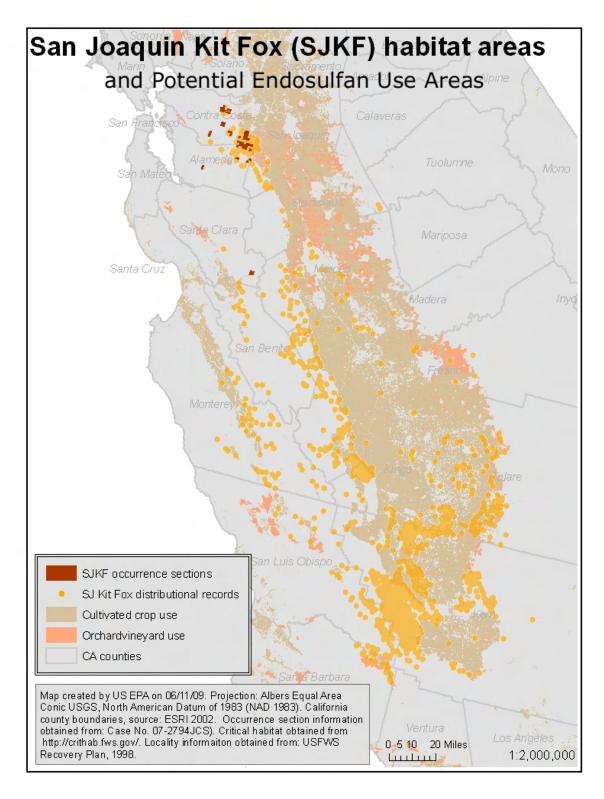


Figure E.4. San Joaquin Kit Fox Habitat Areas and Cultivated Crop/Orchard Use

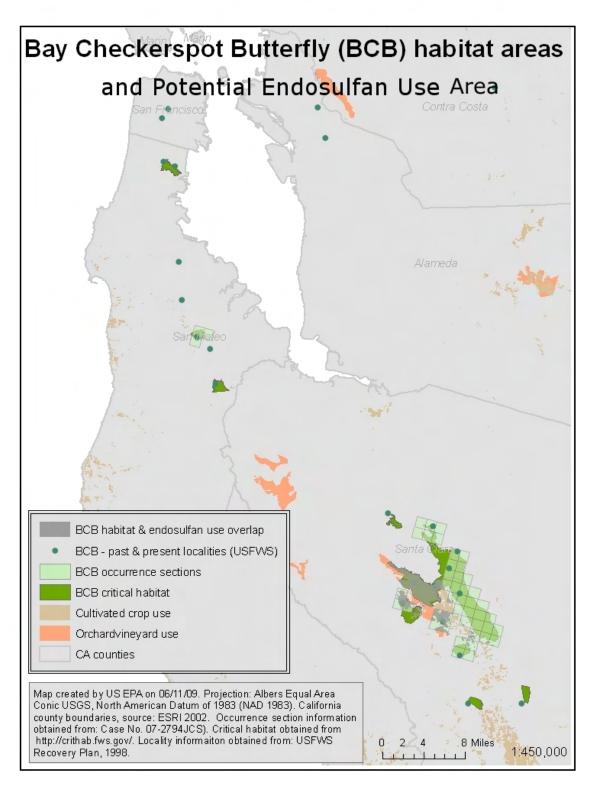


Figure E.5. Bay Checkerspot Butterfly Habitat Areas and Cultivated Crop/Orchard Use

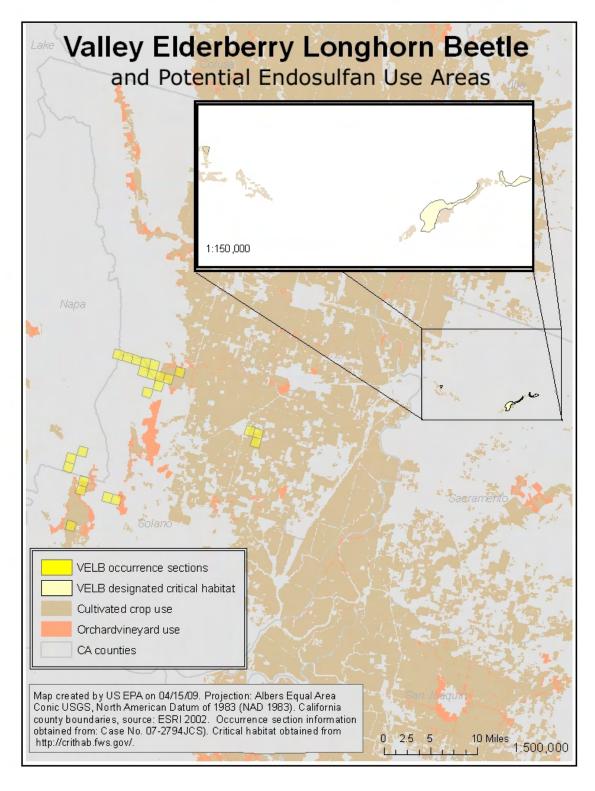


Figure E.6. Valley Elderberry Longhorn Beetle Habitat Areas and Cultivated Crop/Orchard Use

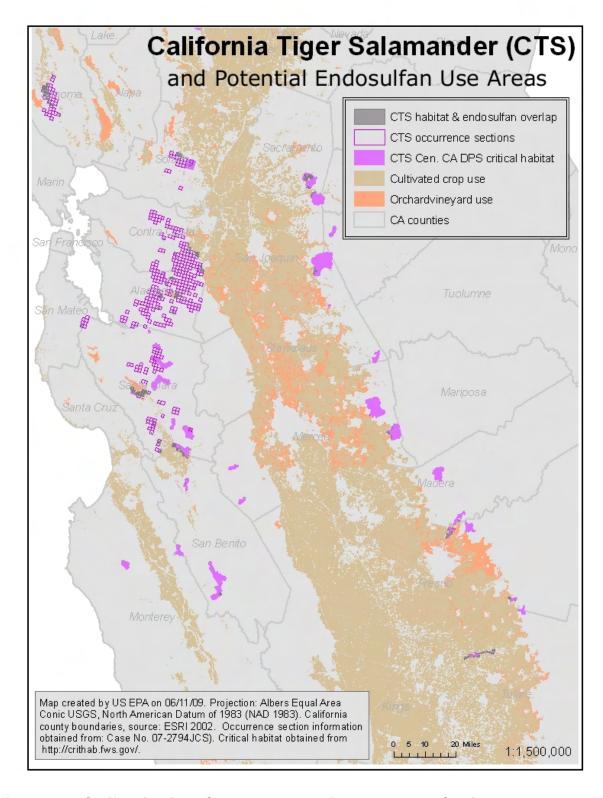


Figure E.7. California Tiger Salamander Habitat Areas and Cultivated Crop/Orchard Use